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## **CLAIMS**

What is claimed is:

1. A method for selecting a fulfillment plan for moving an item within a supply chain, comprising:

receiving an order for an item;

constructing a list of alternative fulfillment plans for moving the item within the supply chain;

evaluating the constructed alternative fulfillment plans against a predetermined criteria; and

selecting for implementation the constructed alternative fulfillment plan that most closely meets the predetermined criteria, the selected alternative fulfillment plan being used to position the item for use in meeting the order.

- 2. The method as recited in claim 1, further comprising the step of using a customer specified level of service when constructing the list of alternative fulfillment plans.
- 3. The method as recited in claim 1, further comprising the step of using branch and bound techniques to determine candidate sourcing points for the item when constructing the list of alternative fulfillment plans.
- 4. The method as recited in claim 1, further comprising the step of using a customer specified point of delivery when constructing the list of alternative fulfillment plans.

- 6. The method as recited in claim 1, further comprising the step of using various
  5 combinations of sourcing points within the supply chain when constructing the list of alternative fulfillment plans.
  - 7. The method as recited in claim 1, further comprising the step of using customer specified consolidation requirements when constructing the list of alternative fulfillment plans.
  - 8. The method as recited in claim 1, further comprising the step of using activity costs when constructing the list of alternative fulfillment plans.

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- 9. The method as recited in claim 1, further comprising the step of using inventory age when constructing the list of alternative fulfillment plans.
  - 10. The method as recited in claim 1, further comprising the step of using a customer specified price quote when evaluating the constructed alternative fulfillment plans against a predetermined criteria.
  - 11. A computer readable media having instructions for use in selecting a fulfillment plan for moving an item within a supply chain, the instructions performing steps comprising:

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constructing a list of alternative fulfillment plans for moving an item within the supply chain;

evaluating the constructed alternative fulfillment plans against a predetermined criteria; and

selecting for implementation the constructed alternative fulfillment plan that most closely meets the predetermined criteria, the selected alternative fulfillment plan being used to position the item for use in meeting the order.

- 12. The computer readable media as recited in claim 11, wherein the instructions further perform the step of using a customer specified level of service when constructing the list of alternative fulfillment plans.
- 13. The computer readable media as recited in claim 11, wherein the instructions further perform the step of using branch and bound techniques to determine candidate sourcing points for the item when constructing the list of alternative fulfillment plans.
- 14. The computer readable media as recited in claim 11, wherein the instructions further perform the step of using a customer specified point of delivery when constructing the list of alternative fulfillment plans.

15. The computer readable media as recited in claim 11, wherein the instructions further perform the step of using a customer specified delivery date when constructing the list of alternative fulfillment plans

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- 16. The computer readable media as recited in claim 11, wherein the instructions further perform the step of using various combinations of sourcing points within the supply chain when constructing the list of alternative fulfillment plans.
- 17. The computer readable media as recited in claim 11, wherein the instructions further perform the step of using customer specified consolidation requirements when constructing the list of alternative fulfillment plans.
- 18. The computer readable media as recited in claim 11, wherein the instructions further perform the step of using activity costs when constructing the list of alternative fulfillment plans.
  - 19. The computer readable media as recited in claim 11, wherein the instructions further perform the step of using inventory age when constructing the list of alternative fulfillment plans.
  - 20. The computer readable media as recited in claim 11, wherein the instructions further perform the step of using a customer specified price quote when evaluating the constructed alternative fulfillment plans against a predetermined criteria.